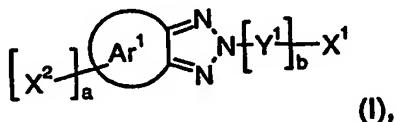


## Claims

1. An electroluminescent device, comprising a 2H-benzotriazole compound, especially a compound of the formula



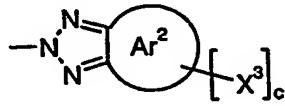
(I),

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a is 0, or 1,

b is 0, or 1,

X¹ is a group of formula

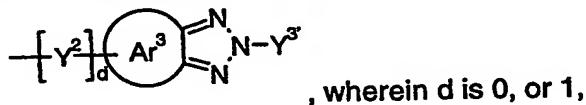


, if b is 1, or Y³, if b is 0, wherein

10

c is 0, or 1

X² and X³ are independently of each other a group of formula



, wherein d is 0, or 1,

Ar¹, Ar², and Ar³ are independently of each other aryl or heteroaryl, which can optionally be substituted, especially C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted,

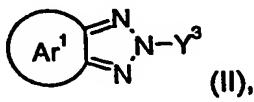
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Y¹ and Y² are independently of each other a divalent linking group, and

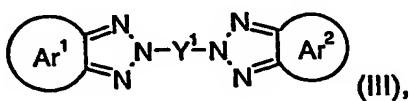
Y³ and Y⁴ are independently of each other aryl or heteroaryl, which can optionally be substituted, especially C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted.

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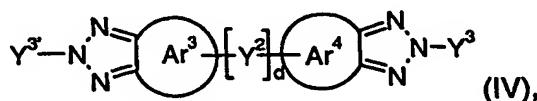
2. An electroluminescent device according to claim 1, comprising a 2H-benzotriazole compound of the formula



(II),

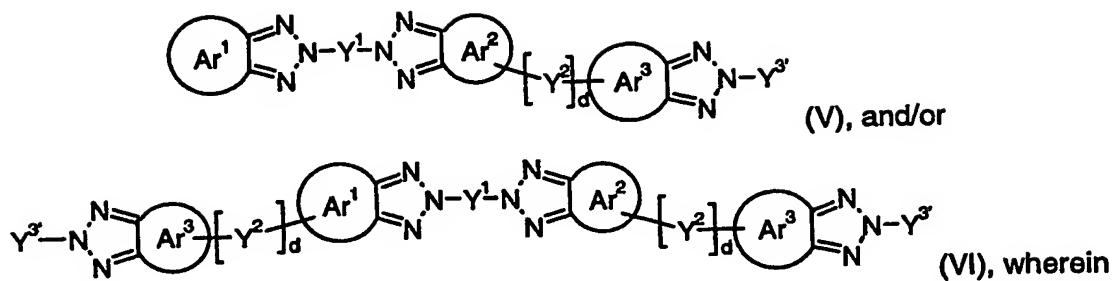


(III),



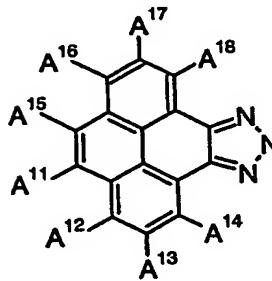
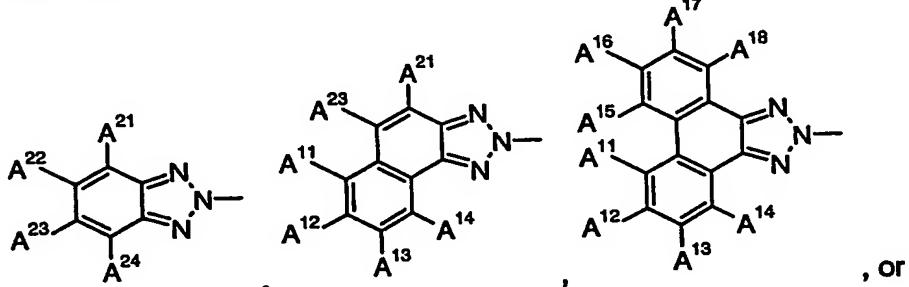
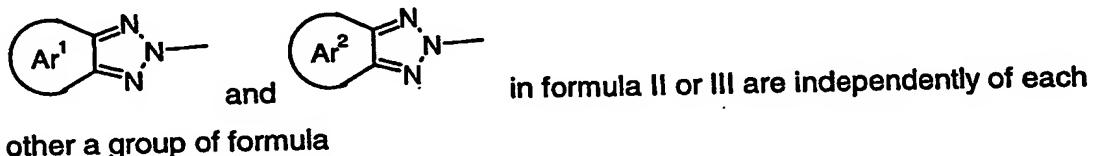
(IV),

25



d, Ar<sup>1</sup>, Ar<sup>2</sup>, Ar<sup>3</sup>, Y<sup>1</sup> and Y<sup>2</sup> are defined as in claim 1,  
Ar<sup>4</sup> stand for C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted,  
and  
Y<sup>3</sup> and Y<sup>3'</sup> are independently of each other C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can  
optionally be substituted.

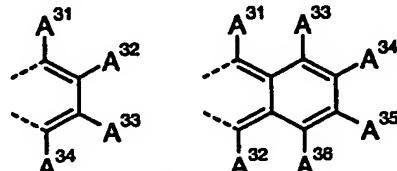
3. An electroluminescent device according to claim 2, wherein



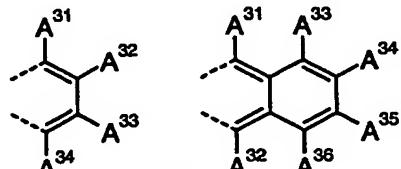
, wherein

A<sup>21</sup>, A<sup>22</sup>, A<sup>23</sup>, A<sup>24</sup>, A<sup>11</sup>, A<sup>12</sup>, A<sup>13</sup>, A<sup>14</sup>, A<sup>15</sup>, A<sup>16</sup>, A<sup>17</sup> and A<sup>18</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, -NR<sup>25</sup>R<sup>26</sup>, C<sub>1</sub>-C<sub>24</sub>alkylthio, -PR<sup>32</sup>R<sup>32</sup>, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is

substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>, or



5 A<sup>22</sup> and A<sup>23</sup> or A<sup>11</sup> and A<sup>23</sup> are a group , or , or  
two groups A<sup>11</sup>, A<sup>12</sup>, A<sup>13</sup>, A<sup>14</sup>, A<sup>15</sup>, A<sup>16</sup>, A<sup>17</sup> and A<sup>18</sup>, which are neighbouring to each



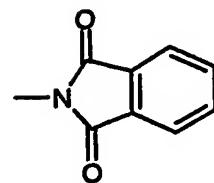
other, are a group , or , wherein A<sup>31</sup>, A<sup>32</sup>, A<sup>33</sup>, A<sup>34</sup>, A<sup>35</sup>, A<sup>36</sup> and A<sup>37</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-

10 C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>,

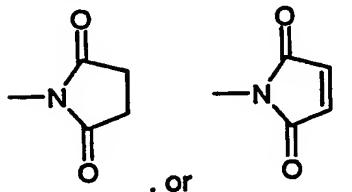
15 D is -CO-; -COO-; -S-; -SO-; -SO<sub>2</sub>-; -O-; -NR<sup>25</sup>-; -SiR<sup>30</sup>R<sup>31</sup>-; -POR<sup>32</sup>-; -CR<sup>23</sup>=CR<sup>24</sup>-; or -C≡C-; and

E is -OR<sup>29</sup>; -SR<sup>29</sup>; -NR<sup>25</sup>R<sup>26</sup>; -COR<sup>28</sup>; -COOR<sup>27</sup>; -CONR<sup>25</sup>R<sup>28</sup>; -CN; -OCOOR<sup>27</sup>; or halogen; wherein

20 R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are independently of each other H; C<sub>6</sub>-C<sub>18</sub>aryl; C<sub>6</sub>-C<sub>18</sub>aryl which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkoxy; C<sub>1</sub>-C<sub>24</sub>alkyl; or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-; or



$R^{25}$  and  $R^{28}$  together form a five or six membered ring, in particular



$R^{27}$  and  $R^{28}$  are independently of each other H;  $C_6$ - $C_{18}$ aryl;  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkoxy;  $C_1$ - $C_{24}$ alkyl; or  $C_1$ - $C_{24}$ alkyl which is interrupted by  $-O-$ ,

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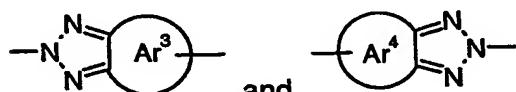
$R^{29}$  is H;  $C_6$ - $C_{18}$ aryl;  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkoxy;  $C_1$ - $C_{24}$ alkyl; or  $C_1$ - $C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{30}$  and  $R^{31}$  are independently of each other  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl, and

10

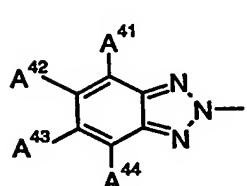
$R^{32}$  is  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl.

4. An electroluminescent device according to claim 2, wherein

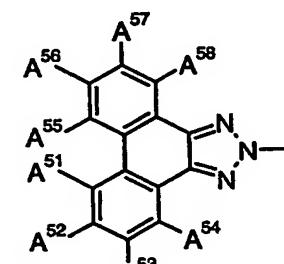
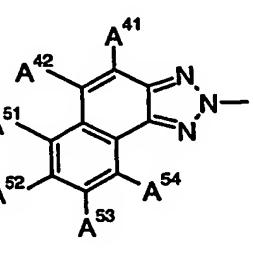


in formula IV are independently of each other

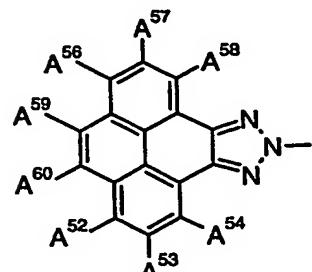
a group of formula



,



, or



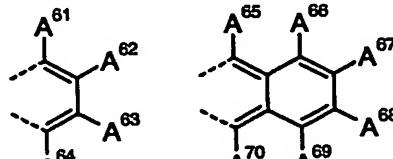
, wherein

15

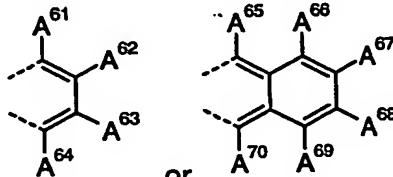
**A<sup>41</sup>, A<sup>42</sup>, A<sup>43</sup>, A<sup>44</sup>, A<sup>51</sup>, A<sup>52</sup>, A<sup>53</sup>, A<sup>54</sup>, A<sup>55</sup>, A<sup>56</sup>, A<sup>57</sup>, A<sup>58</sup>, A<sup>59</sup> and A<sup>60</sup>** are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, NR<sup>25</sup>R<sup>26</sup>, C<sub>1</sub>-C<sub>24</sub>alkylthio, -PR<sup>32</sup>R<sup>32</sup>, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>,

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or



A<sup>42</sup> and A<sup>43</sup> or A<sup>42</sup> and A<sup>51</sup> are a group, or, two groups A<sup>51</sup>, A<sup>52</sup>, A<sup>53</sup>, A<sup>54</sup>, A<sup>55</sup>, A<sup>56</sup>, A<sup>57</sup>, A<sup>58</sup>, A<sup>59</sup> and A<sup>60</sup>, which are neighbouring to



each other, are a group, or, wherein A<sup>61</sup>, A<sup>62</sup>, A<sup>63</sup>, A<sup>64</sup>, A<sup>65</sup>, A<sup>66</sup>, A<sup>67</sup>, A<sup>68</sup>, A<sup>69</sup> and A<sup>70</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>,

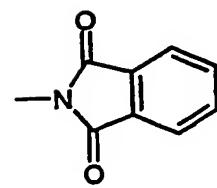
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15 A<sup>66</sup>, A<sup>67</sup>, A<sup>68</sup>, A<sup>69</sup> and A<sup>70</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>,

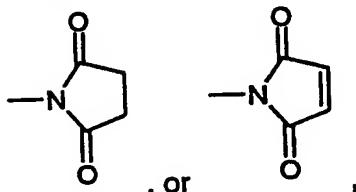
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20 D is -CO-; -COO-; -S-; -SO-; -SO<sub>2</sub>-; -O-; -NR<sup>25</sup>-, -SiR<sup>30</sup>R<sup>31</sup>-; -POR<sup>32</sup>-; -CR<sup>23</sup>=CR<sup>24</sup>-; or -C≡C-; and

25 E is -OR<sup>29</sup>; -SR<sup>29</sup>; -NR<sup>25</sup>R<sup>26</sup>; -COR<sup>28</sup>; -COOR<sup>27</sup>; -CONR<sup>25</sup>R<sup>26</sup>; -CN; -OCOOR<sup>27</sup>; or halogen; wherein R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are independently of each other H; C<sub>6</sub>-C<sub>18</sub>aryl; C<sub>6</sub>-C<sub>18</sub>aryl which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkoxy; C<sub>1</sub>-C<sub>24</sub>alkyl; or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-; or



$R^{25}$  and  $R^{26}$  together form a five or six membered ring, in particular



$R^{27}$  and  $R^{28}$  are independently of each other H;  $C_6$ - $C_{18}$ aryl;  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkoxy;  $C_1$ - $C_{24}$ alkyl; or  $C_1$ - $C_{24}$ alkyl which is interrupted by  $-O-$ ,

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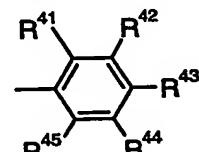
$R^{29}$  is H;  $C_6$ - $C_{18}$ aryl;  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkoxy;  $C_1$ - $C_{24}$ alkyl; or  $C_1$ - $C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{30}$  and  $R^{31}$  are independently of each other  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl, and

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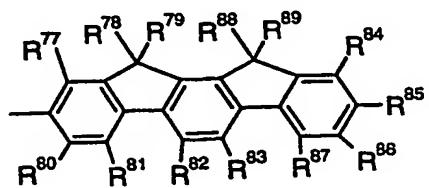
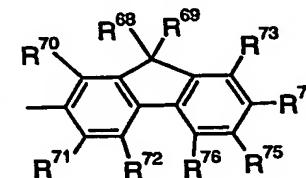
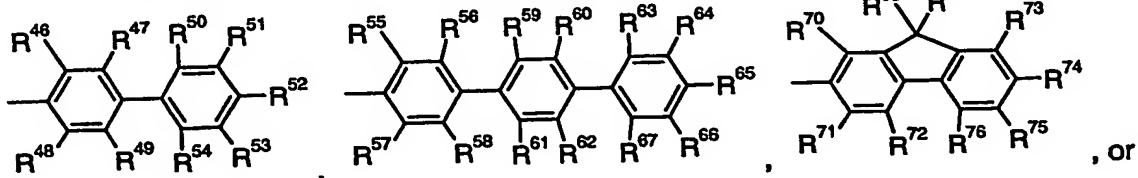
$R^{32}$  is  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl, wherein one of the substituents  $A^{41}$ ,  $A^{42}$ ,  $A^{43}$ ,  $A^{44}$ ,  $A^{51}$ ,  $A^{52}$ ,  $A^{53}$ ,  $A^{54}$ ,  $A^{55}$ ,  $A^{56}$ ,  $A^{57}$ ,  $A^{58}$ ,  $A^{59}$ ,  $A^{60}$ ,  $A^{61}$ ,  $A^{62}$ ,  $A^{63}$ ,  $A^{64}$ ,  $A^{65}$ ,  $A^{66}$ ,  $A^{67}$ ,  $A^{68}$ ,  $A^{69}$  and  $A^{70}$  represents a single bond.

5. An electroluminescent device according to claim 2, 3 or 4, wherein



$Y^3$  and  $Y^{3'}$  are independently of each other a group of formula

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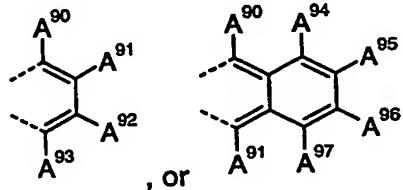
, wherein

$R^{41}$ ,  $R^{42}$ ,  $R^{43}$ ,  $R^{44}$ ,  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ ,  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $R^{59}$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$ ,  $R^{63}$ ,  $R^{64}$ ,  $R^{65}$ ,  $R^{66}$ ,  $R^{67}$ ,  $R^{70}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ ,  $R^{76}$ ,  $R^{77}$ ,  $R^{80}$ ,  $R^{81}$ ,  $R^{82}$ ,  $R^{83}$ ,  $R^{84}$ ,  $R^{85}$ ,  $R^{86}$ , and  $R^{87}$  are independently of each other H,  $C_1$ - $C_{24}$ alkyl, which is

20

optionally substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>alkenyl, which is optionally substituted by E, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, which is optionally substituted by E, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, which is optionally substituted by E, C<sub>6</sub>-C<sub>18</sub>aryl, which is optionally substituted by E, C<sub>1</sub>-C<sub>24</sub>alkoxy, which is optionally substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>18</sub>aryloxy, which is optionally substituted by E, C<sub>7</sub>-C<sub>18</sub>arylalkoxy, which is optionally substituted by E, C<sub>1</sub>-C<sub>24</sub>alkylthio, which is optionally substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>alkylselenium, which is optionally substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>alkyltellurium, which is optionally substituted by E and/or interrupted by D, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, or C<sub>6</sub>-C<sub>18</sub>aralkyl, which is optionally substituted by E, or

10 two groups R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>50</sup>, R<sup>51</sup>, R<sup>52</sup>, R<sup>53</sup>, R<sup>54</sup>, R<sup>55</sup>, R<sup>56</sup>, R<sup>57</sup>, R<sup>58</sup>, R<sup>59</sup>, R<sup>60</sup>, R<sup>61</sup>, R<sup>62</sup>, R<sup>63</sup>, R<sup>64</sup>, R<sup>65</sup>, R<sup>66</sup>, R<sup>67</sup>, R<sup>70</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, R<sup>76</sup>, R<sup>77</sup>, R<sup>80</sup>, R<sup>81</sup>, R<sup>82</sup>, R<sup>83</sup>, R<sup>84</sup>, R<sup>85</sup>, R<sup>86</sup>, and R<sup>87</sup>, which are neighbouring to each other, are a group



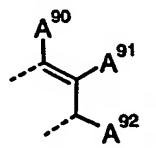
, or , wherein A<sup>90</sup>, A<sup>91</sup>, A<sup>92</sup>, A<sup>93</sup>, A<sup>94</sup>, A<sup>95</sup>, A<sup>96</sup> and A<sup>97</sup> are

15 independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E

20 and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>, R<sup>68</sup>, R<sup>69</sup>, R<sup>78</sup>, R<sup>79</sup>, R<sup>88</sup> and R<sup>89</sup> are independently of each other C<sub>1</sub>-C<sub>18</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, or C<sub>7</sub>-C<sub>25</sub>aralkyl, or

25 R<sup>68</sup> and R<sup>69</sup>, R<sup>78</sup> and R<sup>79</sup>, and/or R<sup>88</sup> and R<sup>89</sup> form a ring, especially a five- or six-membered ring, or

R<sup>68</sup> and R<sup>70</sup>, R<sup>69</sup> and R<sup>73</sup>, R<sup>77</sup> and R<sup>78</sup> and/or R<sup>84</sup> and R<sup>89</sup> are a group



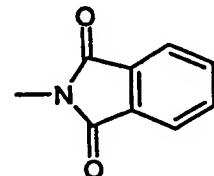
D is -CO-; -COO-; -S-; -SO-; -SO<sub>2</sub>-; -O-; -NR<sup>25</sup>-; -SiR<sup>30</sup>R<sup>31</sup>-; -POR<sup>32</sup>-; -CR<sup>23</sup>=CR<sup>24</sup>-; or -

C≡C-; and

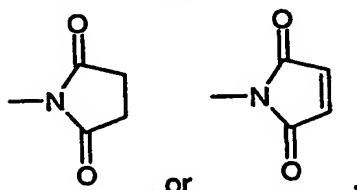
E is -OR<sup>29</sup>; -SR<sup>29</sup>; -NR<sup>25</sup>R<sup>28</sup>; -COR<sup>28</sup>; -COOR<sup>27</sup>; -CONR<sup>25</sup>R<sup>26</sup>; -CN; -OCOOR<sup>27</sup>; or

halogen; wherein

5 R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>28</sup> are independently of each other H; C<sub>6</sub>-C<sub>18</sub>aryl; C<sub>6</sub>-C<sub>18</sub>aryl which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkoxy; C<sub>1</sub>-C<sub>24</sub>alkyl; or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-; or



R<sup>25</sup> and R<sup>26</sup> together form a five or six membered ring, in particular



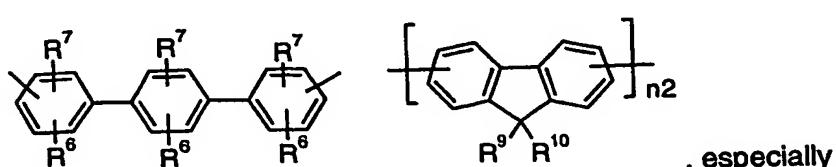
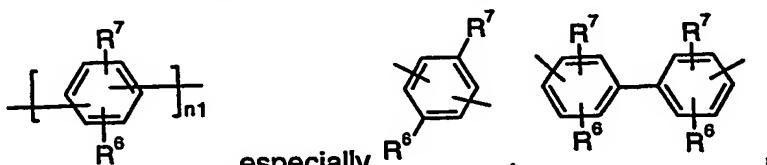
10 R<sup>27</sup> and R<sup>28</sup> are independently of each other H; C<sub>6</sub>-C<sub>18</sub>aryl; C<sub>6</sub>-C<sub>18</sub>aryl which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkoxy; C<sub>1</sub>-C<sub>24</sub>alkyl; or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-,

R<sup>29</sup> is H; C<sub>6</sub>-C<sub>18</sub>aryl; C<sub>6</sub>-C<sub>18</sub>aryl, which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkoxy; C<sub>1</sub>-C<sub>24</sub>alkyl; or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-,

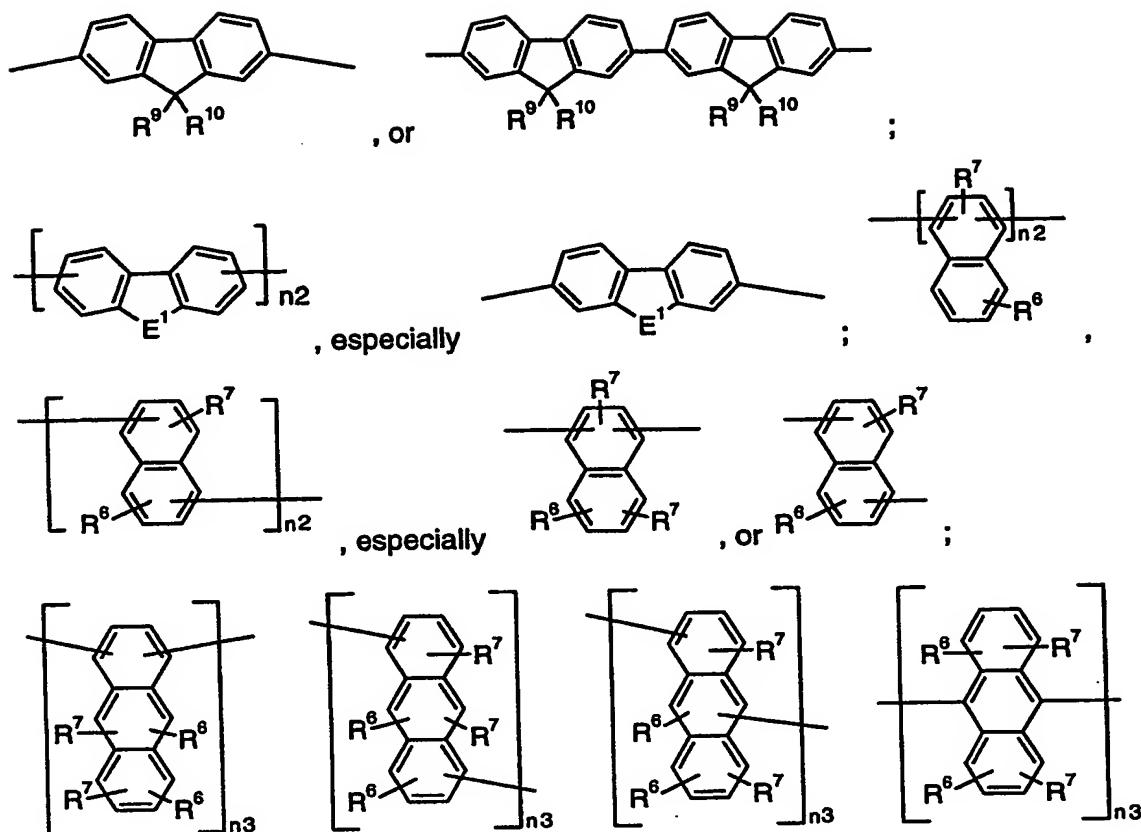
15 R<sup>30</sup> and R<sup>31</sup> are independently of each other C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>6</sub>-C<sub>18</sub>aryl, or C<sub>6</sub>-C<sub>18</sub>aryl, which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, and  
R<sup>32</sup> is C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>6</sub>-C<sub>18</sub>aryl, or C<sub>6</sub>-C<sub>18</sub>aryl, which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl.

6. An electroluminescent device according to any of claims 1 to 5, wherein

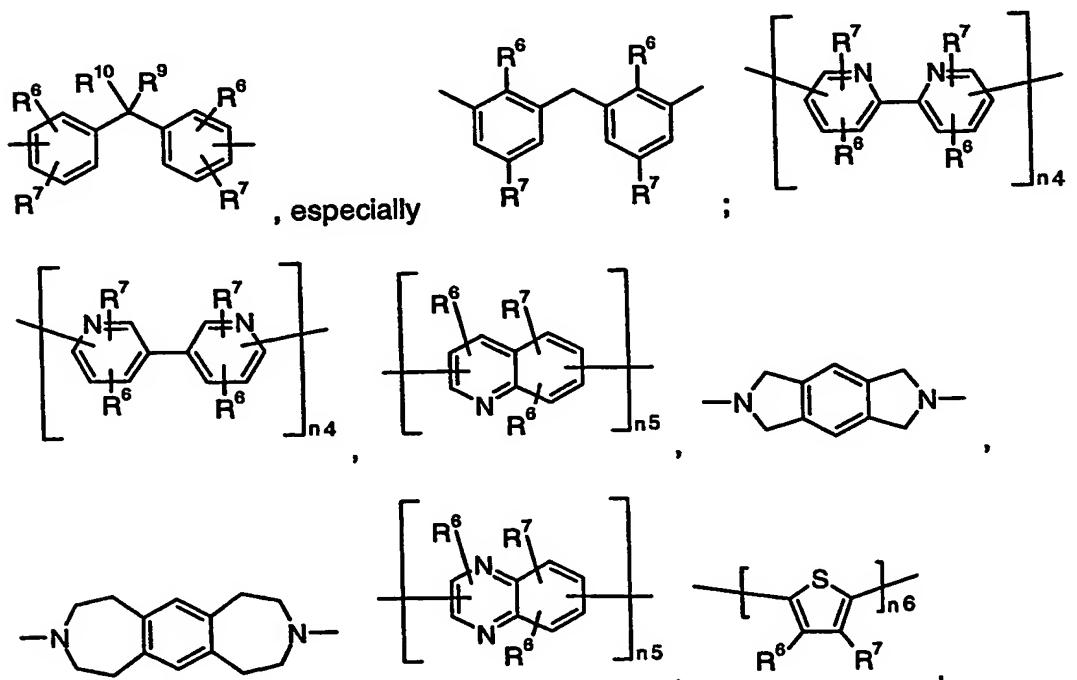
20 Y<sup>1</sup> and Y<sup>2</sup> are independently of each other

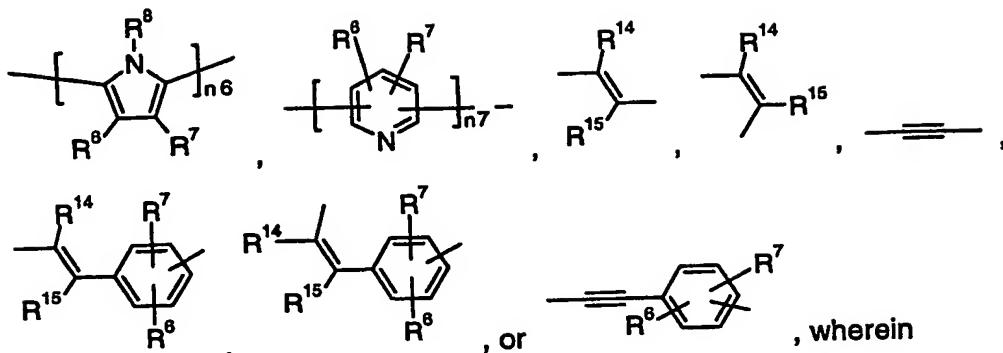


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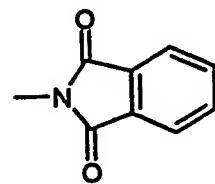
$n_1, n_2, n_3, n_4, n_5, n_6$  and  $n_7$  are 1, 2, or 3, in particular 1,

$E^1$  is  $-S-$ ,  $-O-$ , or  $-NR^{25}'-$ , wherein  $R^{25}'$  is  $C_1-C_{24}$ alkyl, or  $C_6-C_{10}$ aryl,

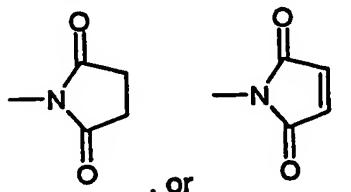
15  $R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkyl which is substituted by E and/or interrupted by D,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{24}$ alkenyl,  $C_2$ - $C_{24}$ alkynyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkoxy which is substituted by E and/or interrupted by D, or  $C_7$ - $C_{25}$ aralkyl, or

20 R<sup>9</sup> and R<sup>10</sup> form a ring, especially a five- or six-membered ring,  
 R<sup>14</sup> and R<sup>15</sup> are independently of each other H, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, or C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E,  
 D is -CO-, -COO-, -S-, -SO-, -SO<sub>2</sub>-, -O-, -NR<sup>25</sup>-, -SiR<sup>30</sup>R<sup>31</sup>-, -POR<sup>32</sup>-, -CR<sup>23</sup>=CR<sup>24</sup>-, or -

25      C=C-, and  
 E is -OR<sup>29</sup>, -SR<sup>29</sup>, -NR<sup>25</sup>R<sup>26</sup>, -COR<sup>28</sup>, -COOR<sup>27</sup>, -CONR<sup>25</sup>R<sup>26</sup>, -CN, -OCOOR<sup>27</sup>, or  
 halogen, wherein  
 R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are independently of each other H, C<sub>6</sub>-C<sub>18</sub>aryl, C<sub>6</sub>-C<sub>18</sub>aryl which is  
 substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted  
 30      by -O-, or



$R^{25}$  and  $R^{26}$  together form a five or six membered ring, in particular



$R^{27}$  and  $R^{28}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkyl which is interrupted by  $-O-$ ,

5

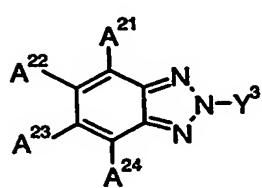
$R^{29}$  is H,  $C_6$ - $C_{18}$ aryl,  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{30}$  and  $R^{31}$  are independently of each other  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl, and

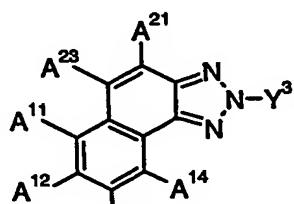
10

$R^{32}$  is  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{18}$ aryl, or  $C_6$ - $C_{18}$ aryl, which is substituted by  $C_1$ - $C_{24}$ alkyl.

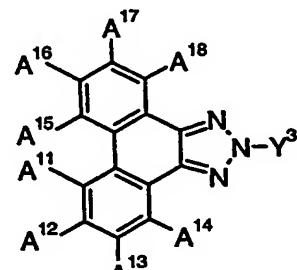
7. An electroluminescent device according to claim 2, 3, or 5, wherein the 2H-benzotriazole compound is a compound of formula



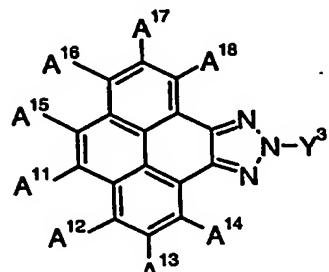
(IIIa),



(IIIb),



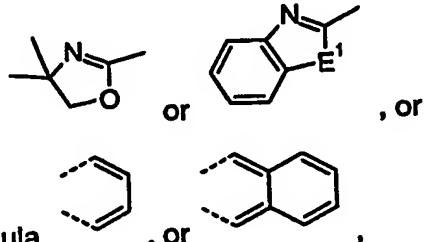
(IIIc), or



(IId), wherein

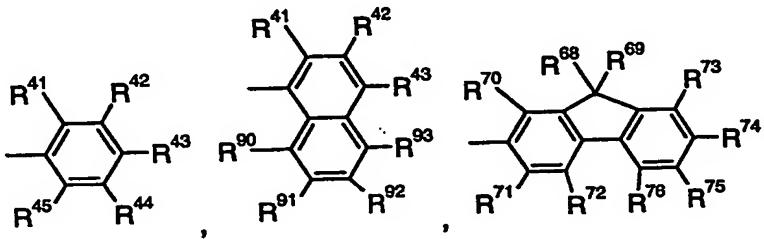
15

$A^{21}$ ,  $A^{22}$ ,  $A^{23}$  and  $A^{24}$  are independently of each other hydrogen, halogen,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ perfluoroalkyl,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ - $C_{10}$ heteroaryl, especially a group of formula

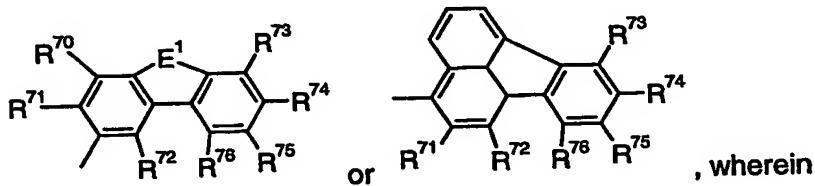


$A^{22}$  and  $A^{23}$  or  $A^{11}$  and  $A^{23}$  are a group of formula

5  $A^{11}$ ,  $A^{12}$ ,  $A^{13}$ ,  $A^{14}$ ,  $A^{15}$ ,  $A^{16}$ ,  $A^{17}$ , and  $A^{18}$  are independently of each other H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ - $C_{10}$ heteroaryl, wherein  $R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_7$ - $C_{18}$ aralkyl, or  $C_1$ - $C_{24}$ alkyl,  $R^{27}$  is  $C_1$ - $C_{24}$ alkyl, and

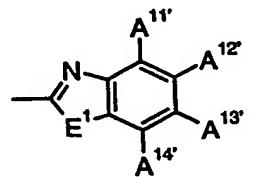


10  $Y^3$  is a group of formula

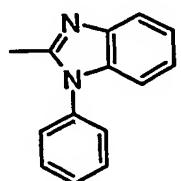


$R^{41}$  is hydrogen,  $C_1$ - $C_{24}$ alkoxy, or  $OC_7$ - $C_{18}$ aralkyl,

$R^{42}$  is hydrogen, or  $C_1$ - $C_{24}$ alkyl,

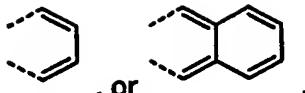


$R^{43}$  is hydrogen, halogen,  $-CONR^{25}R^{26}$ ,  $-COOR^{27}$ ,



15 especially , or , wherein  $E^1$  is  $-S-$ ,  $-O-$ , or  $-NR^{25}-$ , wherein  $R^{25}$  is  $C_1$ - $C_{24}$ alkyl, or  $C_6$ - $C_{10}$ aryl,  $R^{110}$  is H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or

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$R^{42}$  and  $R^{43}$  are a group of formula

$R^{44}$  is hydrogen, or  $C_1$ - $C_{24}$ alkyl,

$R^{45}$  is hydrogen, or  $C_1$ - $C_{24}$ alkyl,

$A^{11}$ ,  $A^{12}$ ,  $A^{13}$ , and  $A^{14}$  are independently of each other H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ -

5  $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ ,

$R^{68}$  and  $R^{69}$  are independently of each other  $C_1$ - $C_{24}$ alkyl, especially  $C_4$ - $C_{12}$ alkyl,

especially hexyl, heptyl, 2-ethylhexyl, and octyl, which can be interrupted by one or two oxygen atoms,

$R^{70}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ ,  $R^{76}$ ,  $R^{90}$ ,  $R^{91}$ ,  $R^{92}$ , and  $R^{93}$  are independently of each other

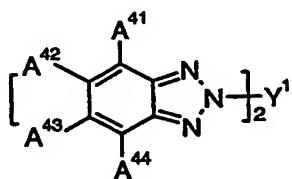
10 H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{10}$ aryl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ ,

$R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_7$ - $C_{18}$ aralkyl, or  $C_1$ - $C_{24}$ alkyl, and

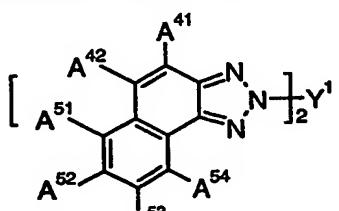
$R^{27}$  is  $C_1$ - $C_{24}$ alkyl.

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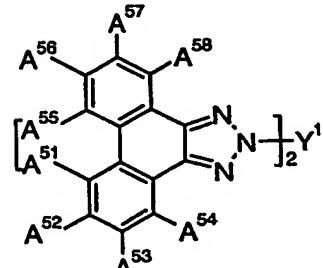
8. An electroluminescent device according to claim 2, 3, or 6, wherein the 2H-benzotriazole compound is a compound of formula



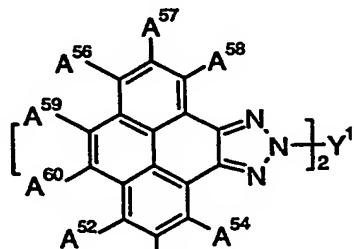
(IIIa),



(IIIb),



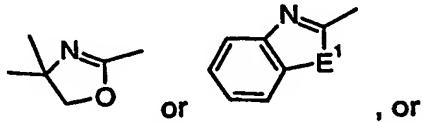
(IIIc), or



(IIId), wherein

20  $A^{41}$ ,  $A^{42}$ ,  $A^{43}$  and  $A^{44}$  are independently of each other hydrogen, halogen,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ perfluoroalkyl,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CO NR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ -

$C_{10}$ heteroaryl, especially a group of formula



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A<sup>42</sup> and A<sup>43</sup> are a group of formula

, or

A<sup>51</sup>, A<sup>52</sup>, A<sup>53</sup>, A<sup>54</sup>, A<sup>55</sup>, A<sup>56</sup>, A<sup>57</sup>, A<sup>58</sup>, A<sup>59</sup> and A<sup>60</sup> are independently of each other H, CN, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkylthio, C<sub>6</sub>-C<sub>18</sub>aryl, -NR<sup>25</sup>R<sup>28</sup>, -CONR<sup>25</sup>R<sup>28</sup>, or -COOR<sup>27</sup>, or C<sub>2</sub>-C<sub>10</sub>heteroaryl, wherein

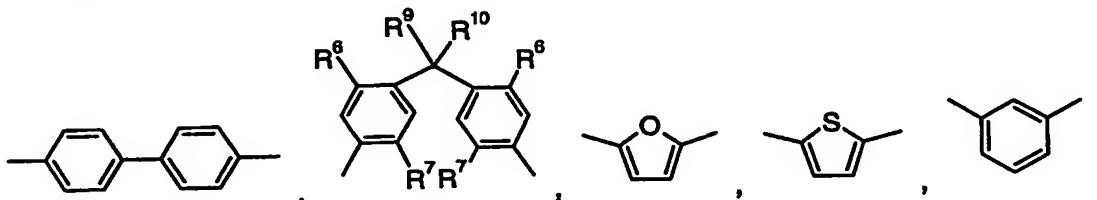
5

E<sup>1</sup> is O, S, or -NR<sup>25</sup>-,

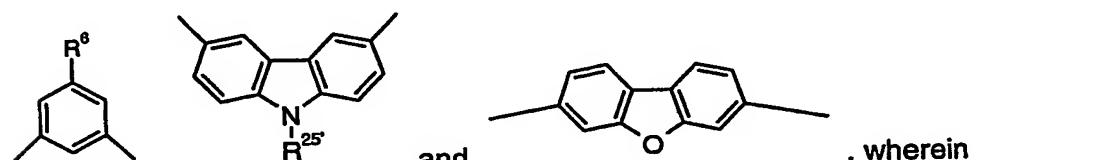
R<sup>25</sup> and R<sup>28</sup> are independently of each other H, C<sub>6</sub>-C<sub>18</sub>aryl, C<sub>7</sub>-C<sub>18</sub>aralkyl, or C<sub>1</sub>-C<sub>24</sub>alkyl,

R<sup>27</sup> is C<sub>1</sub>-C<sub>24</sub>alkyl, and

Y<sup>1</sup> is a group of formula



10



and

, wherein

R<sup>6</sup> is C<sub>1</sub>-C<sub>24</sub>alkoxy, or -O-C<sub>7</sub>-C<sub>25</sub>aralkyl, R<sup>7</sup> is H, or C<sub>1</sub>-C<sub>24</sub>alkyl, R<sup>9</sup> and R<sup>10</sup> are independently of each other C<sub>1</sub>-C<sub>24</sub>alkyl, especially C<sub>4</sub>-C<sub>12</sub>alkyl, which can be interrupted by one or two oxygen atoms, and

R<sup>25</sup> is C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>6</sub>-C<sub>10</sub>aryl.

15

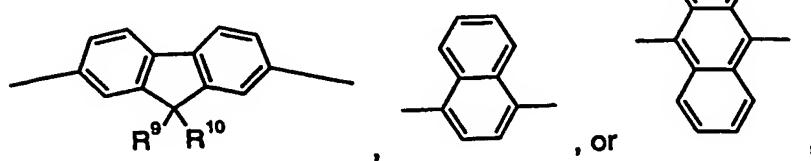
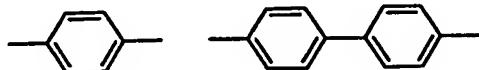
9. An electroluminescent device according to claim 2, 4, 5 or 6, wherein the 2H-benzotriazole compound is a compound of formula

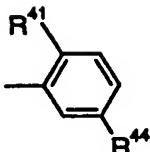


(VIa), wherein d is 0, or 1,

20

Y<sup>2</sup> is a group of formula -O-, -S-, -NR<sup>25</sup>-,





Y<sup>3</sup> is a group of formula R<sup>9</sup>-Ar<sup>1</sup>-R<sup>10</sup>, wherein

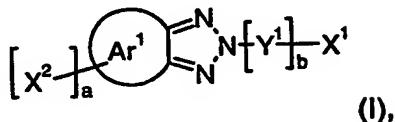
R<sup>9</sup> and R<sup>10</sup> are independently of each other C<sub>1</sub>-C<sub>24</sub>alkyl, especially C<sub>4</sub>-C<sub>12</sub>alkyl, which can be interrupted by one or two oxygen atoms,

R<sup>25</sup> is H, C<sub>6</sub>-C<sub>18</sub>aryl, C<sub>7</sub>-C<sub>18</sub>aralkyl, or C<sub>1</sub>-C<sub>24</sub>alkyl,

5 R<sup>41</sup> is C<sub>1</sub>-C<sub>24</sub>alkoxy, or C<sub>7</sub>-C<sub>15</sub>phenylalkoxy, and

R<sup>44</sup> is H, or C<sub>1</sub>-C<sub>24</sub>alkyl.

10. A 2H-benzotriazole compound of the formula

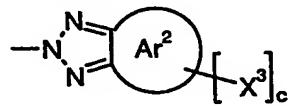


(I),

10 a is 0, or 1,

b is 0, or 1,

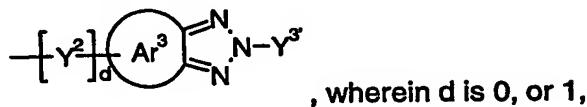
X<sup>1</sup> is a group of formula



, if b is 1, or Y<sup>3</sup>, if b is 0, wherein

c is 0, or 1

15 X<sup>2</sup> and X<sup>3</sup> are independently of each other a group of formula



, wherein d is 0, or 1,

Ar<sup>1</sup>, Ar<sup>2</sup>, and Ar<sup>3</sup> are independently of each other aryl or heteroaryl, which can optionally be substituted, especially C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted,

20 Y<sup>1</sup> and Y<sup>2</sup> are independently of each other a divalent linking group, and

Y<sup>3</sup> and Y<sup>3</sup> are independently of each other aryl or heteroaryl, which can optionally be substituted, especially C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted.